

Serial No.: 09/882,308

REMARKS

By this amendment, the specification, drawings, and claims 1, 5, 6, 8, 11-16, and 25-27 have been amended and claims 3, 4, 7, 17-23, and 28 have been canceled to place this application in condition for allowance. Currently, claims 1, 2, and 5, 6, 8-16, and 25-27 are before the Examiner for consideration on their merits.

The objection and rejection regarding claims 17-23 in terms of claiming an application of the system have been overcome by the cancellation of these claims. Applicant reserves the right to file a continuation/divisional application covering the various uses of the device of the invention.

The issues of indefiniteness have also been overcome by the amendments to claims 5, 6, 8, 11-16, and 25-27, and the rejection under 35 U.S.C. § 112, second paragraph should be withdrawn.

Regarding the prior art rejection, the amendments to claim 1 establish its patentability, and the Examiner cannot rely on the cited prior art patents of Powers or Namba, or the combination thereof with the publication to Blanchard to reject the claims.

In review, claim 1 now defines an array of wells in matrix, spiral or concentric form, and micro-ducts in a three dimensional arrangement for coupling to the wells. The invention involves a matricial organization of channels that can guide one or more reagents to a specific reservoir. This configuration allows a high density of wells, the use of a great number of different liquids and a high rate. The invention is useful of dispensing of droplets, ink, reagents, and molecular synthesis, and can work as an ink cartridge or a diagnostic kit cartridge. Neither Powers nor Namba contains all of the

Serial No.: 09/882,308

elements of claim 1, as amended, and these two patents cannot anticipate claim 1 for this reason alone.

More specifically, Namba fails to teach a membrane, and the three dimensional arrangement of the micro-ducts. Namba uses a bi-morphing element to control delivery of the liquid, and has wells to store the ink but lacks any micro-ducts coupled to the wells as are now claimed.

Similarly, Powers lacks a membrane and the claimed arrangement of the micro-ducts.

The failings in the teachings of Powers and Namba prevents the Examiner from using these patents in any further rejection based on 35 U.S.C. § 102(b).

Lacking a basis to reject amended claim 1 under 35 U.S.C. § 102(b), the Examiner can only rely on 35 U.S.C. § 103(a) to further reject the claim. However, there is no reason that either of Powers or Namba could be modified to arrive at the invention without using Applicant's invention as a teaching template. Such a modification would be the impermissible hindsight reconstruction of the prior art and cannot serve as an objective basis on which to base a rejection under 35 U.S.C. § 103(a).

The rejection based on the combination of Blanchard and either Namba or Powers also fails to establish a *prima facie* case of obviousness. Even assuming that it were proper to modify Blanchard with the dispensing devices of Powers or Namba, the high performance system of claim 1 is not taught for two reasons: (1) as stated above, each of Powers and Namba fails to teach the dispensing-device aspect of the invention, and (2) Blanchard does not supply the deficiencies in either of Powers or Namba, does

Serial No.: 09/882,308

not teach the device of claim 1, and fails to motivate one of skill in the art to modify the devices of Powers or Namba so as to arrive at the invention. Thus, the rejection of claim 1 based on 35 U.S.C. § 103(a) is totally unsubstantiated and must be withdrawn.

Claim 13 defines a dispensing cartridge that includes the features of claim 1, and is patentable over the prior art for this reason alone. Likewise, the kit of claim 14 includes the features of claim 1 and is patentable over the applied prior art.

Claim 2 is also believed to be separately patentable over the applied prior art. This claim has only been rejected based on the combination of Blanchard and either Powers or Namba, but the rejection itself does not set forth a basis as to why claim 2 is obvious. In fact, one aspect of the invention is the ability to produce a high volume of drops, such capability not express or even implied in the applied prior art. The Examiner is requested to provide an objective basis in fact to further reject claim 2.

In summary, by the amendments and arguments stated above, the prior art does not establish a *prima facie* case of anticipation or obviousness against claims 1, 2, 13, and 14. Therefore, these claims, along with their dependent claims are now in condition for allowance.

Accordingly, the Examiner is respectfully requested to examine this application and pass all pending claims onto issue.

The Examiner is also requested to telephone the undersigned if any other issues still exist so that this patent application can be expeditiously allowed.

The above is a complete response to all issues raised in the outstanding Office Action of October 7, 2003.

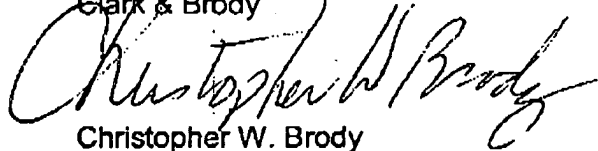
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Serial No.: 09/882,308

including additional extension of times fees to deposit account number 50-1088 and
please credit any excess fees to such account.

Again, reconsideration and allowance of this application is respectfully solicited.

Respectfully submitted,
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Date: January 7, 2004